AMENDMENTS TO THE SPECIFICATION:

Please replace third paragraph on page 1 with the follow:

.Some systems include both a transmitter and a receiver operating in conjunction with the respective local oscillators and having the same frequency but with independent phase and gain errors. Such system exist for example in the case of Wireless Local Area Network WLAN Institute of Electrical and Electronics Engineers (IEEE 802.11), where possible implementation includes a complex up converter and a complex down converter, both having the same local oscillator frequency. This approach, being low cost and simple, is widely used in many applications such as the Wireless Local Area Network WLAN. Each of the converters needs the phase and gain mismatch to be corrected in case of limited analog performance of the converters. Each one must be optimized independently, as transmitter and receiver specifications are set separately due to interoperability requirements between different vendors.

On page 6, please replace

"$\theta \ll 1$ is the phase error and A $\approx$ 1 is the gain error (ratio of the q and i path's gains)."

with:

$\theta \ll 1$ is the phase error and let A $\approx$ 1 is be the gain error (ratio of the gain of the path of q and to the path of i path's gains) (A $\approx$ 1).